

Name: \_\_\_\_\_

### p1029: Combine Like Terms (v3)

#### Example

Combine like terms.

$$-5x + 3x^2 - 3x - 6x + 1 - 2 + 2 + 4x^2 + 6x^2 + 7$$

#### Answer

Combine the quadratic terms.

$$3x^2 + 4x^2 + 6x^2 \equiv 13x^2$$

Combine the linear terms.

$$-5x - 3x - 6x \equiv -14x$$

Combine the constant terms.

$$1 - 2 + 2 + 7 \equiv 8$$

The final result:

$$13x^2 - 14x + 8$$

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#### Question 1

Combine like terms.

$$-x^2 + 9x + 7 - 2x - 4x^2 - 8 + 8x + 6 + 5x^2 - 7x^2$$

$$-7x^2 + 15x + 5$$

## Question 2

Combine like terms.

$$5x + 6x^2 - 9 + x^2 - 8 - 5x^2 + 2x + 8 - 6x - 1$$

$$2x^2 + x - 10$$

## Question 3

Combine like terms.

$$1 - 3 + 7x^2 + 3x - 1 + 2x - 8x + 5x^2 - 5x^2 + 4x$$

$$7x^2 + x - 3$$

## Question 4

Combine like terms.

$$4 - 7x^2 + 3x + 9x + 7x^2 + 5x - 9 - 4x^2 + 2 - 2$$

$$-4x^2 + 17x - 5$$